



PM-251439D

2023-02

Eff w/Serial No. MB330529A

Processes



MIG (GMAW) Welding

Pulsed MIG (GMAW-P)

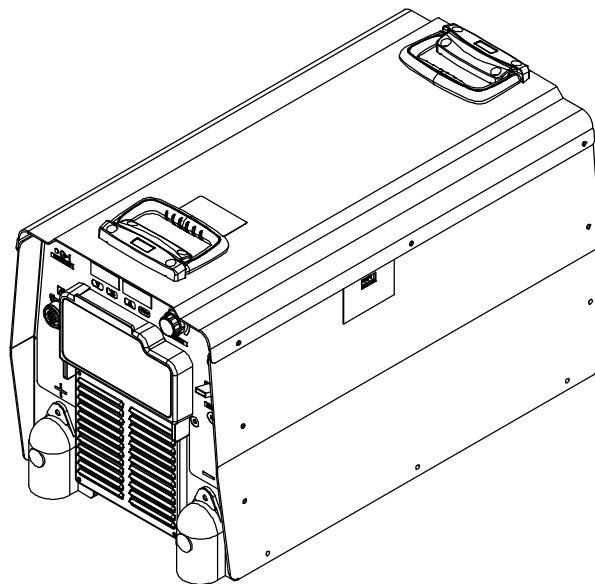
Description



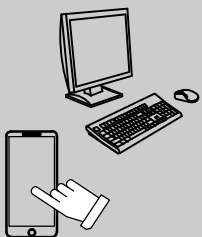
Arc Welding Power Source

InvisionTM 450 MPa

Eff w/Serial No.
MB330529A And Following



PARTS MANUAL



For product information,
Owner's Manual translations,
and more, visit

www.MillerWelds.com

SECTION 1 – PARTS LIST FOR SERIAL NO. MB330529A AND FOLLOWING

 Hardware is common and
not available unless listed.

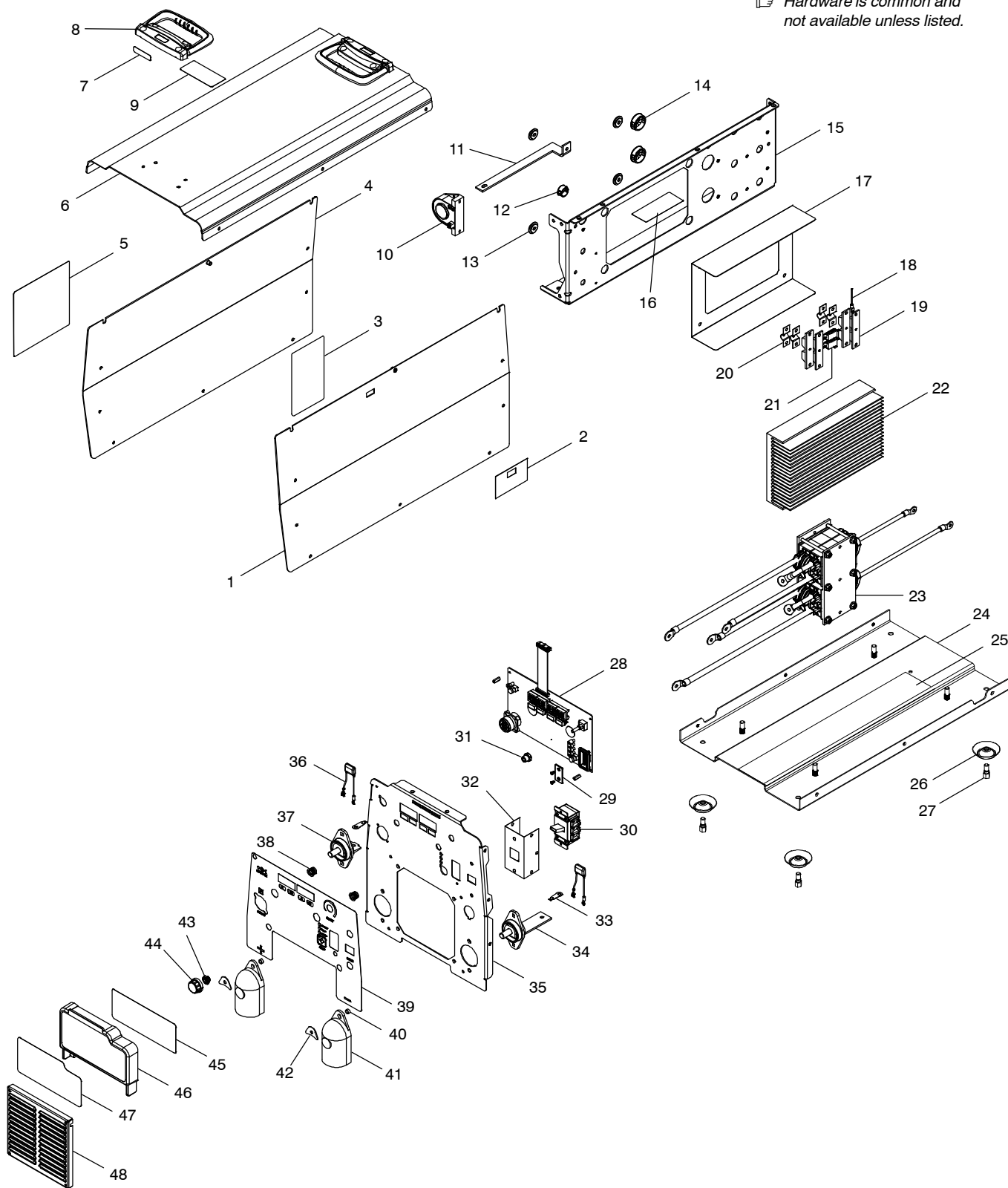
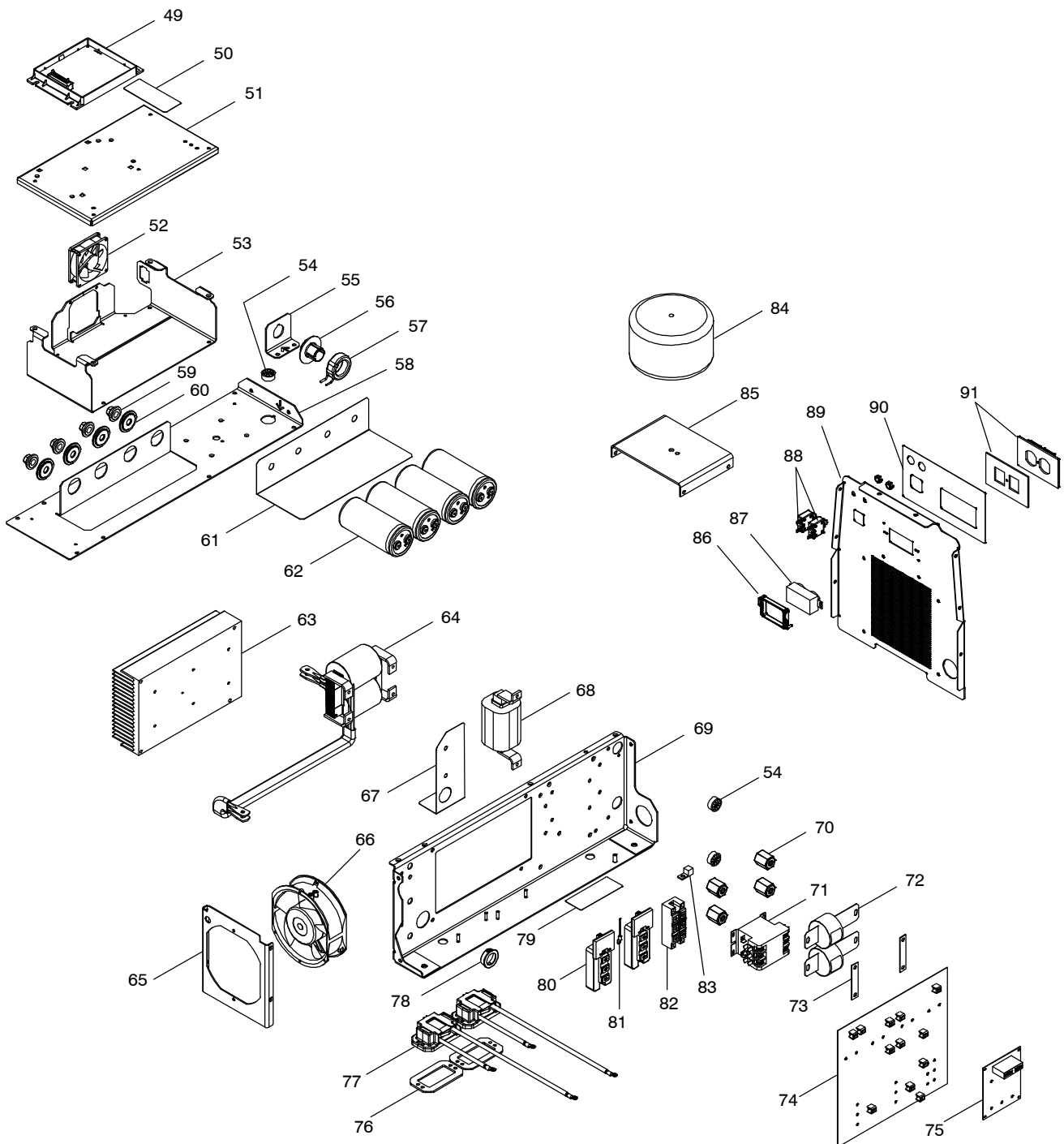


Figure 1-1. Parts Assembly

Eff w/Serial No. MB330529A And Following



Eff w/Serial No. MB330529A And Following

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
Figure 1-1. Parts Assembly				
1		249804	Panel, Side Rh W/Nut Insert (Includes)	1
		178551	Insulator, Side	1
2		222317	Label, Warning Match Input Power To Voltage Shown (Prior to MG512507U)	1
2		276297	Label, Warning Match Input Pwr To Voltage (EN/FR/SP) (Eff w/MG512507U thru MH312523U)	1
2		279531	Label, Important Input Voltage (Eff w/MH312524U)	1
3		237155	Label, Important Input Power/Relink Connections	1
4		249803	Panel, Side Lh W/Nut Insert (Includes)	1
5		134327	Label, Warning General Precautionary Static&Wire Fe (Prior to MG512507U)	2
5		274964	Label, Warning General Precautionary (EN/FR/SP) (Eff w/MG512507U)	1
6		+249111	Cover, Top	1
7		135483	Label, Important Remove These Two Handle Screws	2
8		249848	Handle, Rubberized Carrying	2
9		138442	Label, Warning Falling Equipment Can Injure (Prior to MG512507U)	2
9		275316	Label, Warning Falling Equipment (EN/FR/SP) (Eff w/MG512507U)	1
10	HD1	168829	Transducer, Current 1000A Module Max Open Loop	1
		250063	Cable Assy, Current Feedback (Prior to MC390065U)	1
	L5	254680	Cable Assy, Current Feedback W/Ferrite Core (Eff w/MC390065U)	1
	PLG 9, 19	115094	Housing Plug+Pins (Service Kit) (Eff w/MC390065U)	2
11		183827	Bus Bar, Output	1
12		154408	Bushing, Snap-In Nyl .562 Id X .875 Mtg Hole Cent	1
13		196355	Insulator, Screw	4
14		179276	Bushing, Snap-In Nyl 1.000 Id X 1.375 Mtg Hole Cent	2
15		+249527	Windtunnel, Lh W/Studs	1
16		218004	Label, Warning Electric Shock/Exploding Parts (Prior to MG512507U)	1
16		219844	Label, Warning Electric Shock/Exploding Parts-Wdles (Eff w/MG512507U)	1
17		249618	Insulator, Heat Sink	1
18	RT1	199798	Thermistor, NTC 30K OHM @ 25 Deg C 18.00In2500V	1
19		201531	Kit, Diode Power Module	4
20		199840	Bus Bar, Diode	4
21		232296	Resistor/Capacitor Assy	2
22		204165	Heat Sink, Rect Dual Diode	1
23	T1	249096	XFMR, HF (Prior to ME432589U)	1
23	T1	263252	XFMR, HF (Eff w/ME432589U)	1
24		249110	Base	1
25		269262	Insulator, Base/Bus Bar (Eff w/MF062544U)	1
26		229325	Foot, Mtg Unit	4
27		176736	Screw, Mtg Foot	4
28	PC3	251423	Circuit Card Assy, Front Pnl & Dspl W/Cover & Label	1
	PLG 18	250065	Plug, W/Leads (Voltage Feedback) RC2	1
	PLG 21	136810	Housing Plug+Pins (Service Kit)	1
	RC 21	167640	Housing Plug+Pins (Service Kit)	1
29		230944	Cover, Enclosure Connector Db-9	1
30	S1	244920	Switch, Tgl 3Pst 40A 600VAC Scr Term Wide Tgl	1
31		231470	Nut, Adapter Encoder Shaft Mtg 375-32 To 500-28	1
32		176226	Insulator, Switch Power	1
33		010381	Connector, Rectifier	2
34		182707	Terminal, Pwr Output Black (Prior to MG512507U)	1
34		274844	Terminal, Pwr Output Black (Eff w/MG512507U)	1
35		251597	Panel, Front W/Studs	1
36	C7, 8	222488	Capacitor Assy,	2
37		181245	Terminal, Pwr Output Red (Prior to MG512507U)	1
37		274848	Terminal, Pwr Output Red (Eff w/MG512507U)	1
38		216112	Fastener, Panel Receptacle Quick Access	2

Eff w/Serial No. MB330529A And Following

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
Figure 1-1. Parts Assembly (Continued)				
39		251149	Nameplate	1
40		181169	Spacer, Output Stud	2
41		186621	Boot, Generic Output Stud	2
42		180735	Washer, Output Stud	2
43		231469	Nut, 500-28 .69Hex .28H Brs Conical Knurl	1
44		174991	Knob, Pointer 1.250 Dia X .250 Id W/Spring Clip-.21	1
45		251155	Label, Process	1
46		246919	Door, W/Quick Access Ball Fasteners	1
47			Label (Order By Model And Serial Number)	1
48		175138	Box, Louver	1
49	PC1	251592	Circuit Card Assy, Control W/Program (Prior to MG512507U)	1
49	PC1	260544	Circuit Card Assy, Control W/Program 230/460V (Eff w/MG512507U)	1
	PLG 2, 5,			
	7, 8, 10	131054	Housing Plug+Pins (Service Kit) RC2, 5, 7, 8, 10	4
	PLG 3	130203	Housing Plug+Pins (Service Kit) RC3	1
	PLG 4	115093	Housing Plug+Pins (Service Kit) RC4	1
	PLG 6	115092	Housing Plug+Pins (Service Kit) RC6	1
	PLG 9	115094	Housing Plug+Pins (Service Kit) RC9	1
50		218004	Label, Warning Electric Shock/Exploding Parts (Prior to MG512507U)	3
50		219844	Label, Warning Electric Shock/Exploding Parts-Wdles (Eff w/MG512507U)	3
51		249237	Panel, Mtg PC Card	1
52	FM2	183918	Motor, Fan 24VDC 3000 RPM 43 Cfm W/10 Ohm Resistor	1
53		249236	Bracket, Mtg Capacitor/PC Board/Fan	1
54		153403	Bushing, Snap-in Nyl .750 Id X 1.000 Mtg Hole Cent	2
55		255855	Bracket, Mtg Ct (Eff w/MB470025A)	1
56		177547	Bushing, Snap-in Nyl Ct-Mount 1.093 Mtg Hole	1
57	CT1	181271	XFMR, Current 500 Turn	1
58		251137	Windtunnel, Cover	1
59		217040	Nut, Nylon M12 Thread Capacitor Mounting	4
60		251701	Adapter, Nut Capacitor	4
61		250260	Insulator, Capacitor Mtg	1
62	C3, 4, 5, 6	206755	Kit, Capacitor (Prior to MF042615U)	1
62	C3, 4, 5, 6	256680	Kit, Capacitor (Eff w/MF042615U)	1
63		179930	Heat Sink, Power Module	1
64	Z1	180029	Stabilizer, Output (Prior to MF042615U)	1
64	Z1	270446	Stabilizer, Output (Eff w/MF042615U)	1
65		251220	Shroud, Fan	1
66	FM1	175084	Fan, Muffin 24VDC 3000 RPM 255 Cfm 6.378 Mtg Holes (Prior to NC212562U)	1
66	FM1	291013	Fan, Muffin 24VDC 4500 RPM 352 Cfm 6.378 Mtg Holes (Eff w/NC212562U)	1
67		181925	Insulator, Stabilizer Lead	1
68		180026	Inductor, Input	1
69		+249105	Windtunnel, Rh W/Studs	1
70		025248	Stand-off, Insul .250-20 X 1.250 Lg X .437 Thd (Prior to NC452514U)	4
70		292960	Stand-off, Insul .250-20 X 1.250 Lg X .312 Thd (Eff w/NC452514U)	4
71	W1	180270	Contact, Def Prp 40A 3P 24VAC Coil W/Boxlug	1
72	C1, 2	280914	Capacitor, Polyp Film .34 UF 1700 VRMS +/-10%	2
73		185992	Bus Bar, Capacitor	2
74	PC2	236049	Circuit Card Assy, Interconnecting With Components	1
	PLG 11	131056	Housing Plug+Pins (Service Kit) RC7, 8	1
	PLG 12	115093	Housing Plug+Pins (Service Kit) RC2	1
	PLG 13	115091	Housing Plug+Pins (Service Kit) RC9	1
75	PC6	249114	Circuit Card Assy, Relink	1
76		218566	Gasket, Inductor Mounting E70 Ferrite Core	2
77		249108	Inductor, DI/DT (Prior to ME432589U)	2
77		256646	Inductor, DI/DT (Eff w/ME432589U)	2
78		057358	Bushing, Snap-in Nyl 1.000 Id X 1.375 Mtg Hole	1

Eff w/Serial No. MB330529A And Following

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
Figure 1-1. Parts Assembly (Continued)				
... 79		218004	Label, Warning Electric Shock/Exploding Parts (Prior to MG512507U)	1
... 79		219844	Label, Warning Electric Shock/Exploding Parts-Wdles (Eff w/MG512507U)	1
... 80	PM1, 2	235309	Kit, Transistor IGBT Module	1
		250048	Plug W/Leads Gate (Prior to MD140013U)	1
		260751	Plug W/Leads Gate (Eff w/MD140013U)	1
	PLG 3	130203	Housing Plug+Pins (Service Kit) RC3 On PC1	1
	PLG 15, 16	115094	Housing Plug+Pins (Service Kit) RC1 On PC4, 5	2
... 81	RT2	199798	Thermistor, Ntc 30K Ohm @ 25 Deg C 18.00In2500V	1
... 82	SR1	184260	Kit, Diode Power Module	1
... 83		145743	Lug, Univ W/Scr 600V 2-14 Wire .250 Stud	1
... 84	T2	183192	XFMR, Control Toroidal 230/460 VAC Pri 1513Va 60 Hz (Prior to ME432589U)	1
... 84	T2	260739	XFMR, Control Toroidal 230/460 VAC Pri 1456Va 60 Hz (Eff w/ME432589U)	1
	RC14	115090	Housing Plug+Pins (Service Kit)	1
... 85		180105	Bracket, Mtg XFMR Aux	1
... 86		265204	Ring, Aux Power Receptacle (Eff w/ME252595U)	1
... 87		604176	Rcpt, Str Dx Grd 2P3W 15A 125V *5-15R	1
... 88	CB1, CB2	083432	Supplementary Pro, Man Reset 1P 10A 250VAC Frict	2
... 89		+249118	Panel, Rear (Aux) (Prior to ME252595U)	1
... 89		+263580	Panel, Rear W/Nut Inserts (Aux) (Eff w/ME252595U)	1
		262913	Kit, Strain Relief 1.250 (Eff w/MF442501U)	1
... 90		249834	Nameplate, Rear W/Aux (Prior to MG512507U)	1
... 90		252639	Label, Rear W/Aux (Eff w/MG512507U)	1
... 91		217297	Cover, Receptacle Weatherproof Duplex Rcpt	1

+When ordering a component originally displaying a precautionary label, the label should also be ordered.

To maintain the factory original performance of your equipment, use only Manufacturer's Suggested Replacement Parts. Model and serial number required when ordering parts from your local distributor.

Notes

Miller Electric Mfg. LLC

An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters-USA

USA Phone: 920-735-4505 Auto-Attended
USA & Canada FAX: 920-735-4134
International FAX: 920-735-4125

For International Locations Visit
www.MillerWelds.com

